

**CLAIMS**

What is claimed is:

1. A system for enabling selection of appropriate, available resources for a hardware  
2 component of a data processing system during system boot via a read only medium, said  
3 system comprising:

4 means for detecting a type of said hardware component;

5 means, responsive to said detecting step, for dynamically setting an object of a  
6 second symlink file to a particular resource required for a correct operation of said type  
7 of said hardware component;

8 means for triggering the activation of said second symlink file;

9 means, responsive to said triggering step, for selecting, via said second symlink  
10 file, a resource that corresponds to said object of said second symlink file from among  
11 multiple available resources located on said read only medium; and

12 means for implementing said selected resource to support said hardware  
13 component during operation of said data processing system.

1. 2. The system of Claim 1, further comprising:

2 means for first initiating a boot process from said read only medium on said data  
3 processing system; and

4 means for creating said second symlink file on a RAM of said data processing  
5 system subsequent to said detecting step, wherein said second symlink file is provided  
6 with the capability to receive a trigger and respond to the receipt of said trigger by  
7 pointing to a particular resource file on said read only medium that supports said  
8 hardware component.

1       3.     The system of Claim 2, wherein said triggering means includes means for  
2           executing a first symlink file on said read only medium, wherein said first symlink file  
3           has said second symlink file as its object.

1       4.     The system of Claim 3, wherein said hardware component is a video driver.

1       5.     The system of Claim 4, wherein said resource is an XServer, and said selecting  
2           means selects a particular XServer from among a plurality of XServers, wherein said  
3           selected XServer is a preferred XServer for the particular type of said video driver.

1       6.     The system of Claim 5, wherein said selected XServer has a particular  
2           configuration file that is preferred, said system further comprising:

3           means for creating a third symlink file on said RAM;

4           means for determining which configuration file is preferred for said selected  
5           XServer from among multiple configuration files available for selection on said read only  
6           medium;

7           means, responsive to said determining step, for setting an object of said third  
8           symlink file to said particular configuration file; and

9           means for activating an execution of said third symlink file, wherein said  
10           particular configuration file is selected for said XServer during operation of said  
11           particular type of hardware component.

1       7.     The system of Claim 3, wherein said resource is a configuration file, and said  
2           selecting means selects a particular configuration file from among a plurality of  
3           configuration files located on said read only medium, wherein a selected configuration  
4           file is a preferred configuration file for said type of said hardware component.

1       8.     The system of Claim 3, wherein said resource comprises a particular XServer and  
2     a particular configuration file, wherein:

3             said creating means creates a third symlink file on said RAM;

4             said dynamically setting means includes means for dynamically setting a first  
5     object of a second symlink file located on a RAM of said data processing system to a  
6     particular XServer and dynamically setting a second object of a third symlink file to a  
7     particular configuration file, both required for a correct operation of said hardware  
8     component;

9             said selecting means includes means for respectively selecting said XServer and  
10    said configuration file from among multiple available XServers and configuration files  
11    located on said read only medium that corresponds to said first object and said second  
12    object, respectively; and

13             said implementing means, implements said selected XServer and configuration  
14    file to support said hardware component during operation of said data processing system.

15       9.     The system of Claim 1, wherein said read only medium is a CD ROM and said  
16     first symlink file is boot CD symlink file.

1       10. A computer program product comprising:  
2           a computer readable medium;  
3           program code on said computer readable medium for enabling selection of  
4           appropriate, available resources for a hardware component of a data processing system  
5           during system boot via a read only medium, said program code comprising code for:  
6           detecting a type of said hardware component;  
7           responsive to said detecting step, dynamically setting an object of a second  
8           symlink file to a particular resource required for a correct operation of said type of said  
9           hardware component;  
10           triggering the activation of said second symlink file;  
11           responsive to said triggering step, selecting, via said second symlink file, a  
12           resource that corresponds to said object of said second symlink file from among multiple  
13           available resources located on said read only medium; and  
14           implementing said selected resource to support said hardware component during  
15           operation of said data processing system.

1       11. The computer program product of Claim 10, further comprising program code  
2           for:

3           first initiating a boot process from said read only medium on said data processing  
4           system; and

5           creating said second symlink file on a RAM of said data processing system  
6           subsequent to said detecting step, wherein said second symlink file is provided with the  
7           capability to receive a trigger and respond to the receipt of said trigger by pointing to a  
8           particular resource file on said read only medium that supports said hardware component.

1       12. The computer program product of Claim 11, wherein said program code for  
2           triggering includes code for executing a first symlink file on said read only medium,  
3           wherein said first symlink file has said second symlink file as its object.

1       13. The computer program product of Claim 12, wherein said hardware component  
2       is a video driver, said resource is an XServer, and said program code for selecting  
3       includes code that selects a particular XServer from among a plurality of XServers,  
4       wherein said selected XServer is a preferred XServer for the particular type of said video  
5       driver.

1       14. The computer program product of Claim 13, wherein said selected XServer has  
2       a particular configuration file that is preferred, said computer program product further  
3       comprising program code for:

4               creating a third symlink file on said RAM;  
5               determining which configuration file is preferred for said selected XServer from  
6       among multiple configuration files available for selection on said read only medium;  
7               responsive to said determining step, setting an object of said third symlink file to  
8       said particular configuration file; and  
9               activating an execution of said third symlink file, wherein said particular  
10      configuration file is selected for said XServer during operation of said particular type of  
11      hardware component.

1       15. The computer program product of Claim 12, wherein said resource is a  
2       configuration file, and said program code for selecting includes code that selects a  
3       particular configuration file from among a plurality of configuration files located on said  
4       read only medium, wherein a selected configuration file is a preferred configuration file  
5       for said type of said hardware component.

1       16. The computer program product of Claim 12, wherein said resource comprises a  
2       particular XServer and a particular configuration file, wherein:  
3               said program code for creating creates a third symlink file on said RAM;

4           said program code for dynamically setting includes code for dynamically setting  
5           a first object of a second symlink file located on a RAM of said data processing system  
6           to a particular XServer and dynamically setting a second object of a third symlink file to  
7           a particular configuration file, both required for a correct operation of said hardware  
8           component;

9           said program code for selecting includes code for respectively selecting said  
10          XServer and said configuration file from among multiple available XServers and  
11          configuration files located on said read only medium that corresponds to said first object  
12          and said second object, respectively; and

13          said program code for implementing implements said selected XServer and  
14          configuration file to support said hardware component during operation of said data  
15          processing system.

1           17. The computer program product of Claim 10, wherein said computer readable  
2           medium is a CD ROM and said first symlink file is a boot CD symlink file.

1           18. A method for enabling selection of appropriate, available resources for a  
2           hardware component of a data processing system during system boot via a read only  
3           medium, said method comprising:

4           detecting a type of said hardware component;  
5           responsive to said detecting step, dynamically setting an object of a second  
6           symlink file to a particular resource required for a correct operation of said type of said  
7           hardware component;

8           triggering the activation of said second symlink file;  
9           responsive to said triggering step, selecting, via said second symlink file, a  
10          resource that corresponds to said object of said second symlink file from among multiple  
11          available resources located on said read only medium; and

implementing said selected resource to support said hardware component during operation of said data processing system.

19. The method of Claim 18, further comprising:

first initiating a boot process from said read only medium on said data processing system; and

creating said second symlink file on a RAM of said data processing system subsequent to said detecting step, wherein said second symlink file is provided with the capability to receive a trigger and respond to the receipt of said trigger by pointing to a particular resource file on said read only medium that supports said hardware component.

20. The method of Claim 19, wherein said triggering step includes executing a first symlink file on said read only medium, wherein said first symlink file has said second symlink file as its object.

21. The method of Claim 20, wherein said hardware component is a video driver, said resource is an XServer, and said selecting step selects a particular XServer from among a plurality of XServers, wherein said selected XServer is a preferred XServer for the particular type of said video driver.

22. The method of Claim 20, wherein said selected XServer has a particular configuration file that is preferred, said method further comprising:

creating a third symlink file on said RAM;  
determining which configuration file is preferred for said selected XServer from among multiple configuration files available for selection on said read only medium;  
responsive to said determining step, setting an object of said third symlink file to said particular configuration file; and

8                   activating an execution of said third symlink file, wherein said particular  
9                   configuration file is selected for said XServer during operation of said particular type of  
10                  hardware component.

1                  23. The method of Claim 20, wherein said resource is a configuration file, and said  
2                  selecting step selects a particular configuration file from among a plurality of  
3                  configuration files located on said read only medium, wherein a selected configuration  
4                  file is a preferred configuration file for said type of said hardware component.

1                  24. The method of Claim 20, wherein said resource comprises a particular XServer  
2                  and a particular configuration file, wherein:

3                   said creating step creates a third symlink file on said RAM;

4                   said dynamically setting step includes dynamically setting a first object of a  
5                  second symlink file located on a RAM of said data processing system to a particular  
6                  XServer and dynamically setting a second object of a third symlink file to a particular  
7                  configuration file, both required for a correct operation of said hardware component;

8                   said selecting step includes respectively selecting said XServer and said  
9                  configuration file from among multiple available XServers and configuration files  
10                 located on said read only medium that corresponds to said first object and said second  
11                 object, respectively; and

12                 said implementing step implements said selected XServer and configuration file  
13                 to support said hardware component during operation of said data processing system.

1                  25. The method of Claim 18, wherein said computer readable medium is a CD ROM  
2                  and said first symlink file is a boot CD symlink file.